

Putting People into Policy:

The Role of Environmental Education and Communication

**A GreenCOM Discussion Paper
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About This Series

This discussion paper is one in a series produced by the Environmental Education and Communication (GreenCOM) Project of the United States Agency for International Development. The series is intended for policy makers, program managers, technical specialists, and others seeking new tools and ideas to achieve environmentally sustainable development. The discussion papers explore the role that Environmental Education and Communication (EE&C) can play in helping people solve a range of environment and development concerns. Topics covered in the series include

- ▶ Policy Development
- ▶ Biodiversity Conservation
- ▶ Sustainable Urbanization
- ▶ Freshwater and Coastal Resources
- ▶ Gender
- ▶ Basic Education

These papers do not provide all the answers. We hope, however, that they serve as a starting point for discussion, inquiry, and action.

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Executive Summary

Environmentally sustainable development brings together concerns about environmental protection and economic growth. A supportive policy framework is a key component in determining whether or not the goal of environmentally sustainable development is achieved.

As this paper describes, effective policy comes down to how people's needs, perspectives, and behaviors are integrated into the policy development process. Environmental Education and Communication (EE&C) provides policy makers, and the many other individuals and groups who play a role in the policy process, with useful tools in ensuring that this integration takes place. Similarly, it provides people with the skills that enable them to become better advocates for policies that reflect their needs and concerns. People are thereby empowered, policies are more effective, and the process of democratization is strengthened.

"Policy and People," the first section of this paper, provides the context for how people, businesses, institutions, and others must work together to achieve policies that promote environmentally sustainable development, and introduces the contributions of EE&C to help in this regard.

The second section, "EE&C: Contributing to Policy Development," describes three, interrelated facets of policy development: formulation, articulation, and implementation. It provides a working definition of EE&C as combining education, behavioral research, social marketing, gender analysis, participatory methodologies, and communications to change the behavior of individuals and groups around specific environmental issues, while at the same time to give them the

knowledge and skills to tackle a broad range of longer-term environmental concerns. It notes that EE&C facilitates policy dialogue between constituents and decision makers, thereby reinforcing mutual trust and facilitating the adoption of better actions by government. EE&C also provides feedbackCevaluating how well a policy is being carried out and what effect it is having.

The following three sections examine the policy development process in action. "Public Awareness and Participation" shows how an innovative EE&C approach promoted environmental awareness across an entire society in The Gambia. In an example of participation in action, the drafting of Canada's Green Plan and Environmental Citizenship Principles enabled multiple stakeholders to become involved in shaping policies that affect them.

"Advocacy and Coalition Building" focuses on techniques to promote specific policy change that have been used by local groups in Costa Rica, Ecuador, and the Philippines. This section also stresses the need for capacity building to address policy change. Environmentally sustainable development requires forging new partnerships among often disparate groups, such as NGOs, corporations, and governments. EE&C provides the communication skills needed to ensure that such partnerships can achieve their objectives.

Environmental awareness is at a global high, yet people continue to deplete natural resources at an unprecedented rate. The section on "Linking Behavior Change to Policy Development" stresses the need to go beyond raising awareness or providing information and instead focusing on what people *do* to harm or improve their environment. Bringing behavioral research to the environmental policy arena is fairly new, but an example from Egypt suggests ways that it can be done.

The section "Measures of Success" raises questions that can be asked to gauge whether EE&C is helping improve policy formulation, articulation, and implementation.

Finally, "At the Core of the Policy Process" provides concluding thoughts about the necessity and value of adopting a multiple stakeholder process, even if it means a whole new way of doing business, to achieve environmentally sustainable development.

Policy and People

Today policy makers throughout the world are seeking to come to terms with a new environmental agenda. One that is pragmatic in bringing together concerns about environmental protection with those of economic growth. At issue is how to achieve environmentally sustainable development, meeting today's human needs without compromising the Earth's natural resource base and the viability of the natural systems upon which all life depends.

Environmentally sustainable development centers on how people use energy, forests, and water resources; how they protect or harm wildlife habitat; and how they live and work in villages, towns, and cities. Many factors influence these actions. But certainly for environmentally sustainable behaviors to become widespread, a supportive policy framework must exist. Environmentally sustainable development requires

"Environmentally sustainable development is about more than sound policies, politics, and institutions. It is about people."

- ▶ a healthy political environment, characterized by environmentally aware leaders and greater popular participation in political decision making;
- ▶ effective policies, laws, and regulations that help promote environmentally sustainable development; and
- ▶ capable institutions to implement policy, advocate reform, and educate both the people and their leaders.

Ultimately, environmentally sustainable development is about more than sound policies, politics, and institutions. It is about people. People conserve resources or destroy them through their everyday actions. And it is people who can serve as catalysts for the development of equitable and just policies.

As this paper discusses, environmental education and communication (EE&C) can help bring people into the policy process in a meaningful and effective way. Involving people in formulating and implementing policies is integral to environmentally sustainable development. When people see the link between policies, their livelihoods, and their children's futures, they become stakeholders in the policy process. As stakeholders, people catalyze policy change. They can organize, advocate, educate, and elevate local issues and concerns to national policy fora. As stakeholders, too, they are more apt to see that policies are understood by others and enforced.

When people—particularly the poor and vulnerable groups—are involved in the policy process, more equitable and effective policies that reflect real needs are likely to result. People are also empowered as they become valued assets in shaping government policy. They begin to exert their rightful role in holding their governments accountable to ensure that appropriate policies are carried out. When people are involved, policy makers also benefit. As they become more familiar with what is happening at the local level, they are more in touch with what their constituents feel and think. By listening to the

voices of individuals and the communities to which they belong, decision makers begin to make more effective policies. The art of policy making increasingly depends on the skill of listening to people and on the ability of people to effectively make themselves heard.

The dialogue that results

is itself at the heart of the democratization process.

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Environmentally sustainable development requires that policy-making processes result in viable regulations and laws that have real impact and are widely supported. Simply put, this is not possible without engaging the people. It is they who are the *real* day-to-day environmental decision makers. To be engaged, people need to be informed. They need to know not only how existing policies affect them, but also understand what new policies could be enacted that would benefit them and their children.

Moreover, as the complexity of what it takes to achieve environmentally sustainable development is increasingly appreciated, it is clear that multiple stakeholders are involved. Broader and broader groups of people need to become engaged. This includes not only the people who consume or manage natural resources at the grassroots level, but also specialists like economists, sociologists, business leaders, farmers, foresters, engineers, lawyers, educators, health professionals, communicators, and many others. Environmentally sustainable development also calls for building bridges between groups that have sometimes found themselves in adversarial positions, such

as industry and environmental organizations. And, it calls for the building of cross-sectoral coalitions that integrate donors, business and industry, and virtually all sectors that impact on social and economic development.

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Policies are intended to promote specific actions or behaviors at international, national, regional, or local levels. Environmentally sustainable development requires significant changes in attitude and behavior not only in developing nations, but also in those nations that consume the most resources, release the most pollution, and have the greatest capacity to make necessary changes. Such change must occur locallyCa fisherman adopting sustainable harvesting practices; institutionallyCa corporation integrating

environmental concerns in configuring its bottom line; regionally; and ultimately, nationally and globally.

Environmental education and communication is fundamental to achieving environmentally sustainable development. Broad-based public education is required for environmental considerations to become a part of the decision-making process of all government agencies, all business enterprisesCindeed, of all people and institutions. Education and advocacy are required to support the unprecedented international cooperation needed to ensure that treaties addressing the global commons, such as the atmosphere and oceans, are adhered to and enforced. Knowing how to understand and change human attitudes and behaviors becomes increasingly important. Profound changes will need to be made in lifestyles and in business conduct.

Effecting change requires more than spotting trends. It calls for know-how in shifting social patterns and norms through applying sound research principles and tested creative approaches.

This paper examines how environmental education and communication helps shape and clarify a policy framework for environmentally sustainable development. The next section explains how EE&C contributes to policy formulation, articulation, and implementation. The following pages focus on three integral components of the policy-making process that rely on EE&C approaches: public awareness and participation, advocacy and constituency building, and behavior change. Finally, criteria for measuring policy impact are proposed that look at the people at the heart of the process.

EE&C: Contributing to Policy Development

Environmental education and communication (EE&C) strategies contribute to three, interrelated facets of the policy process: **formulation**, **articulation**, and **implementation**. EE&C helps shape policy, explain it, and turn it into action.

Shaping, Explaining, and Implementing Policy

"EE&C can help identify and interpret facts to enable diverse audiences to understand them and take appropriate action."

Policy formulation hinges on getting the right information to the right people at the right time. Decision makers need to know what people think and feel about an issue. EE&C research and analysis can enable them to glean insight into their constituents' views and values. Decision makers

and the public alike need hard facts to help evaluate the efficacy of a particular course of action. EE&C can help identify and interpret facts to enable diverse audiences to understand them and take appropriate action. EE&C also assists advocates in packaging information to promote a particular point of view. In short, EE&C helps define *what* information is needed *by whom* and *in what form* to formulate appropriate policies.

What is EE&C?

EE&C combines education, behavioral research, social marketing, gender analysis, participatory methodologies, and communications to change the behaviors of individuals and groups around specific environmental issues, while at the same time giving them the knowledge and skills to tackle a broad range of longer-term environmental concerns.

Because environmentally sustainable development depends on creating practical policies that are based on a sound understanding of human behavior, EE&C has become a pivotal tool in the policy-making process. EE&C programs help uncover the intrinsic logic of human behavior which, in turn, reduces uncertainties in programs, anticipates problems and fears, and weighs the costs and benefits of proposed alternatives.

Depending on target audience and objectives, EE&C takes place in a rich variety of formal, nonformal, and informal settings, including schools, businesses, resource users' associations, NGOs, and the media. The opportunity to work through this diversity of settings helps shape policy for environmentally sustainable development, since policies deal with a range of practices, from agroforestry to water conservation, and with many, different people.

EE&C also contributes to policy formulation by providing policy makers and advocates with the skills to define and articulate their agendas. This results in promoting constructive dialogue. EE&C encompasses awareness and education, which not only result in a more environmentally literate population, but also help grassroots groups articulate their agendas on a national level.

Once made, a policy needs to be explained. In **policy articulation**, EE&C helps specific people understand how key issues affect them. It bridges the information gap between governments and their constituents, between the national level and local communities, between producers and consumers. The

gap closes as environmental policy issues are explained within specific local contexts, as local leaders learn about the planning process and its implications, and as local people begin to challenge and revise inaccurate policy assumptions or rally behind policies that they feel make sense. EE&C can not only ensure that policies, once formulated, are explained to all members of a community, but also can establish feedback mechanisms through which actual consequences of policies are examined for environmental, social, economic, and cultural impacts.

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If EE&C has contributed to policy formulation and articulation in the ways described, **implementation** should come easier: people more readily understand their stake in both the broad policies and the laws and regulations that flow from them. Ideally, too, stakeholder support will contribute to an adequate allocation of resources for policy implementation, which is

key to turning policies from words to actions. To more effectively implement policies, EE&C builds the capacity of national and local institutions to educate, inform, and communicate. Education and communication by governments, interest groups, political parties, and others helps ensure that policies are legitimized and turned into action. People are more apt to support policies when they understand how they directly benefit from the policies. Regulations are more effectively enforced if people are informed about them and have incentive to comply.

Finally, it should be noted that policy development does not necessarily follow a linear formulation-articulation-implementation path. Articulation, for example, may stimulate

a re-examination, and perhaps even a re-formulation of a policy. Implementation, similarly, may identify glitches that can trigger re-examination. This circular process, which education and communication can help facilitate, in fact improves policy relevance and effectiveness.

Fostering Dialogue

EE&C facilitates policy dialogue between government and people, national and local levels, and among multiple stakeholders. It helps reinforce mutual trust and facilitates the adoption of better decisions that impact on a national economy, on society, and on the quality of life for future generations. EE&C also plays a role in evaluating how well a policy is carried out and what impact it is having.

EE&C and Strategic Planning

The strategic planning process adopted in many countries has resulted in National Conservation Strategies (NCSs), Tropical Forestry Action Plans (TFAPs), and National Environmental Action Plans (NEAPs).

The planning process provides an opportunity for national debate on environmental priorities and the formulation of related policy and action programs. Although they have yet to represent all stakeholders, these preparatory processes have attempted to involve a cross-section of society.

On paper, most plans recognize the importance of EE&C. Almost all NEAPs, for example, speak of the need to include education and public awareness as part of their environmental strategic objectives.

In practice, these plans succeed only if the government can raise or allocate appropriate resources, if they receive high-level support, and if the people understand and are committed to the process. Effective communication, therefore, is crucial. When Madagascar first formulated its Environmental Action Plan, for example, most support for it came from external advocacy groups. No internal constituency developed, partly because the benefits of sound natural resource management were not effectively communicated to the Malagasy people. Over time, a backlash resulted, setting back efforts to act on the nation's environmental agenda.

EE&C can help bridge gaps between the national level and local policies. In the Philippines, for example, where national policy encourages greater community power sharing in forest management, field offices of the environmental ministry don't often know how to make this policy work locally. EE&C can provide the training and materials necessary to enable national policy to work at the local level. With the trend toward increasing decentralization and greater autonomy for regions and provinces, EE&C can help local governments, NGOs, and people work together.

In addition to government-people dialogue, EE&C strengthens the connections among other groups. For example, it can provide the tools to bring multiple stakeholders like corporations and environmental groups together by identifying common ground and facilitating productive dialogue. Some corporations, for example, have instituted environmental changes in their policies as a result of listening to their customers, their employees, and/or the people who live near their facilities. Others have set up citizen advisory groups to help shape workable environmental reforms in corporate practice.

Formulation, articulation, and implementation are steps in the policy process. The process works best in a setting that encourages a growing understanding of environmentally sustainable development and that fosters greater public participation in setting agendas that can make it happen. As discussed next, EE&C activities that strengthen public awareness, enhance advocacy skills, and promote behavior change are integral components of such an enabling environment.

Public Awareness and Public Participation

Expanding environmental knowledge and awareness can be a first step in shaping policy toward environmentally sustainable development. Public awareness programs alone are rarely sufficient to influence the policy process, but they can lead to increased understanding by both the public and decision makers, which, in turn, can lead to action. Decision makers need this background to enact appropriate policies and reforms, while the public can use this knowledge as a base for building political action.

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Public awareness programs may be targeted to specific audiences, such as to taxi drivers to maintain their vehicles to reduce air pollution. Conversely, public awareness campaigns are conducted on a national scale or even international scale. The World Wide Fund for Nature, for example, mounted international campaigns to protect tropical rainforests and wetlands

through coordinated national action of its member countries worldwide. These and other campaigns use mass media; advertising; special events; exhibitions; conferences, seminars and workshops; school-based programs; merchandising; and other activities.

Participation, to draw upon the definition developed by the World Bank's Learning Group on Participatory Development, is a "process through which stakeholders influence and share control over development initiatives, and the decisions and

resources which affect them."

In the examples below, the government of The Gambia structured a nationwide environmental awareness program through a popular awards scheme, while Canada incorporated widespread participation in policy support activities when it developed its Green Plan and Environmental Citizenship Principles.

The Gambia's Awards Scheme: Public Awareness to Support National Priorities

An environmental awards scheme conducted by the National Environment Agency (NEA) in The Gambia shows how an innovative EE&C approach can promote environmental awareness across an entire society. NEA developed and conducted the scheme in 1994-95 as a way to expand participation and interest in the environment. A key objective of the country's national policy, The Gambia's Environmental Action Plan (GEAP).

With assistance from USAID's Environmental Education and Communication (GreenCOM) Project, NEA brought together government, NGO, and community representatives to design, implement, and judge the competition. It designed award categories so that schools, communities, women's groups, businesses, micro enterprises, and just about any other possible group in the country could participate in some way. Efforts to sensitize the people were built into the entire process, including phone-in radio programs, community meetings, and interpersonal contacts. These efforts built interest and enthusiasm for the competition, and, more importantly, led to national discussion about broader environmental issues.

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The awards scheme also served as a unifying force, particularly because a military coup d'état took place shortly after the competition was announced. During this sensitive time, working together on an environmental project brought people together. More than six hundred people attended one division's award ceremony,

bringing together local and often rival leaders to recognize environmental achievements.

The awards scheme also stimulated collaboration between the government and NGOs. Schools, farmers, women, youth and religious groups all took active part. Resources were pooled and an infrastructure developed that is now used to develop local environmental action plans and follow-up.

Efforts like the awards scheme serve to focus public attention on the environment, to enhance public awareness of environmental issues, and to engage people in concrete environmental activities. Such national awareness campaigns can lay a useful foundation for action-oriented programs that address specific environmental issues. They can instill more informed thinking about environmental issues in general terms and can also assist in short-term crises.

Canada's Green Plan: Public Participation in Action

The development of Canada's Green Plan provides a useful example of involving people from all walks of life in the policy process. The Green Plan has been the federal government's comprehensive environmental action plan, with targets and schedules supported by \$3 billion of new funds over a five-year period.

A consultation process using EE&C strategies began in 1990 with a background paper entitled "A Framework for Discussion on the Environment." Over the following months, Environment Canada, the country's environmental ministry, held more than forty information sessions across the country to explain the document and the planning process. Canadians further discussed the document and made recommendations to the government about options proposed in it during workshops in seventeen cities. Participants included government officials, academics, and representatives of business, industry, labor, youth, native peoples, religious, environmental, and other groups. In August of that year, a two-day national wrap-up session took place in Ottawa. Discussions focused on "A Report on The Green Plan Consultations," which contained proposed

policy, program, and legislative components. The document synthesized more than three thousand pages of comments; four thousand question response forms; and written suggestions from more than one thousand other Canadian individuals and organizations.

In following years, the Government of Canada returned to

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the people to ensure the Plan continued to identify emerging priorities and observe whether these priorities should subsequently receive funding. The public consultation process remained a key component in developing regulations on such issues as the use of economic instruments to achieve environmental objectives, the establishment of co-operative regimes with native communities, a National Sustainable Fisheries Policy and Action Plan, and a National Waste Reduction Plan.

What the Green Plan highlights is that people in all sectors of society—government, business, industry, labor, science, education, and youth, among others—were eager to work together. Provincial and federal Round Tables have brought together representatives of all major sectors in Canada to share information and ideas on improving the environment.

Broad participation in the Green Plan led to the development of ten Environmental Citizenship Principles for Canadian individuals and groups. These principles include broad environmental practices (for example, "reduce waste"), as well as more process-oriented goals (for example, "work together at the community, provincial, and national levels to achieve environmental goals"). The government ties specific policies, regulations, and programs to these broad principles. Groups outside the government are also applying the Environmental Citizenship Principles to their work. For example, the Association of Canadian Community Colleges and the International Institute for Sustainable Development are using them to foster more environmentally conscious decision-making by college and university leaders.

In addition, the United Nations Environment Programme (UNEP) has embraced the concept of Canada's Environmental Citizenship and is working with its different constituencies to develop a set of Global Environmental Citizenship Principles.

Broadening Public Participation

Participation not only strengthens or introduces democratic approaches in shaping policy, but also makes for more effective environmental policies. Participation of multiple stakeholders at an early stage increases the likelihood of policy or program success. Actively involving stakeholders from various levels, sectors, and disciplines develops consensus among diverse and sometimes disparate interests.

Moreover, community involvement facilitates national or regional policy development because it taps into local social patterns and values that can impact on policy implementation. As communities assume greater responsibility in managing their surrounding natural resources, members are encouraged to monitor, examine, and regulate the policies that they helped generate.

Bringing other key groups into development of environmentally beneficial policies also contributes to a stronger process. Engaging business, religious and academic groups, the media, and other sectors of society broadens the constituency for environmentally sustainable development, leverages additional resources, and amplifies the popular voice for appropriate policy formulation and enactment. For example, the business community in Jamaica has organized an Environment Committee, which seeks to involve its members and the public

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in environmentally sound development. In an example of media involvement, El Diario de Hoy, a national newspaper in El Salvador, produces a Sunday supplement for children entitled "El Guanaquin," which deals with environmental issues each month. It complements the formal educational curriculum by engaging young readers in creative problem solving around environmental issues. In the United States, the McDonald's food chain formed a joint venture with the Environmental Defense Fund, an environmental NGO, to develop a more efficient and publicly acceptable waste- management strategy.

Involving multiple stakeholders in the policy process requires new forms of collaboration and communication, such as focus groups, advisory panels, and fora for dialogue and joint ventures. EE&C plays a pivotal role in fostering partnerships and in mobilizing a common vision.

Advocacy and Constituency Building

Advocacy implies a more targeted approach to the presentation of information than does a public awareness campaign. Advocacy involves the promotion of specific policy change or legal reform through techniques such as coalition and consensus building, the development of partnerships, and the effective use of the media.

Through advocacy, people engage policy and decision makers, providing them with such information as research findings, innovative ideas and approaches, and the views of their constituents. Advocacy also involves packaging accurate and persuasive issues information and targeting it to maximize policy impact.

Environmental advocates can put an issue on a local, national, or global agenda; bring a solution to the attention of decision makers; and galvanize political consensus around an issue. Over the long run, broader advocacy coalitions can come together to carry forward agenda-setting activities. EE&C advocacy tools include

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For example, in Costa Rica, the Fundación Neotropica's Center for Environmental Studies and Policy (CEAP) reached policy makers through a National Assembly seminar that

focused on the importance of sound environmental management. The seminar for legislators coincided with Assembly debate over amending the Constitution to address an individual's right to a clean and healthy environment.

CEAP involved key legislators from both political parties in planning the seminar. Hard-hitting visual presentations showed deteriorating environmental conditions in the country. Details were presented on the impact of ecological changes. While the constitutional amendment did not pass because of other pressing issues, CEAP was accepted as an expert in its field. Its ability to provide non-partisan, concrete, and scientifically sound information led legislators from both parties to begin requesting information from CEAP and seeking its advice on environmental issues.

Local Action Results in New Policies

Local groups can be highly effective in developing constituencies, defining issues, resolving conflict, and ultimately in shaping national environmental policy. The USAID-funded Coastal Resources Management (CRM) Project in Ecuador is an example.

In Ecuador, a country highly dependent on the food and foreign currency it receives through the fishing and shrimp industries, the CRM Project helped clarify the interrelationship between environmental quality and the sustained profitability of fishing, from communities to the highest level of government.

Clearing of mangrove forests, decline in water quality, and conflict between coastal resources users were all contributing to environmental decline. Over fishing and habitat destruction also affected estuaries and in-shore fisheries and the livelihoods of the poorest members of coastal societies.

The project built a local constituency for coastal management and involved local people in defining how best to solve their problems. Fundación Pedro Vicente Maldonado, a local environmental group, developed a profile of coastal provinces that examined the state and use of

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coastal resources and pointed out the need for resource management. For the first time, the knowledge of the elders in the community was solicited to prepare "talking maps" that documented the past and current state of the resource. Public workshops were held in each coastal province to verify the profiles, gather new information, and discuss issues. People who depend on natural resources for a living began to have a voice in the management process.

As dialogue opened among competing groups local fishermen, for example, began to discuss their concerns with tourism promoters popular support grew. A group of local political, academic, religious, and private sector leaders put together a manifesto in support of natural resource management and presented it to Ecuador's then-President, Rodrigo Borja. This was the first time that the coastal provinces had come together to produce a regional statement of needs to the national government.

In January 1989, the President signed an Executive Decree establishing an Interministerial Commission and creating a National Coastal Management Program. The Executive Decree created six Special Management Zones for planning and managing coastal programs. A multi-agency ranger corps was also set up to improve enforcement of regulations. Under the decree, citizen advisory committees in each special zone assist in developing management plans. The committees include local

government officials and representatives of user groups. New policy initiatives such as locally managed mangrove areas and improvements in sanitation have become focal points for community involvement. Public education and outreach are tightly linked to these and other policy and planning activities.

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Subsequently, the project was lauded as a model for dealing with environmental issues by two of Ecuador's Presidents, Rodrigo Borja and Sixto Duran. NGOs like Fundación Pedro Maldonado can be particularly effective at influencing environmental policy. Such groups understand local-level needs and how to interpret them at regional and national levels. They enjoy significant credibility at the local level and can take advantage of local resources to "heat up" an issue to reach the national level.

Coalitions Consolidate Local Action

Advocacy efforts are strengthened when local groups work together to coordinate efforts to achieve common objectives. Cross-sectoral coalitions, which can be nurtured and strengthened through EE&C approaches, have been effective in promoting policy reform in many countries. In the Philippines, the adoption of a new constitution in 1987 provided an opportunity for twelve Filipino national federations of peasants, rural women, and fisherfolk to band together to promote agrarian reform. Their coalition, the Congress for a People's Agrarian Reform Program (CPAR), developed its collective position by consulting with other grassroots organizations, NGOs, churches, academic groups, youth and student groups, and the media, as well as with potential allies in Congress, the

government, and the business sector.

CPAR met with sympathetic legislators, attended Congressional Committee hearings and presented position papers, briefed the Congressional media corps on their issues, organized delegations to meet with legislators and pitched tents on the House of Representatives grounds for a two-week vigil to press for the passage of an Agrarian Reform Law.

Outside the halls of Congress, CPAR held workshops with various sectors to draw up interest and support for their proposals. Rallies and demonstrations pressed for acceleration of Congressional hearing and debates. CPAR worked closely with allies in the Department of Agrarian Reform and utilized every opportunity in the media to move forward their advocacy agenda. A campaign called the "Agrarian Reform Express" was launched, capped by a huge public rally in Manila.

While the final bill signed into law by then-President Corazon Aquino did not completely meet all of its goals, CPAR had achieved significant successes. It brought agrarian reform and rural development high up on the agenda of national policy debate. It also broadened the constituency for reform beyond the peasantry and NGOs to include the church, academic groups, the media, and the professional and business sectors. Broader legitimacy was thereby given to agrarian reform demands. CPAR members gained national recognition and succeeded in expanding their membership and base of support.

Building Capacity for Policy Change

Ultimately, even with the strongest commitment to improving the environment, institutions from NGOs to corporations need new skills and new ways of looking at issues and partners. Depending on the institution, these capacity-building skills

include how to raise funds, build coalitions, evaluate and redesign programs, conduct baseline research, develop action plans, publicize their successes, or reposition for new markets. NGOs in particular may not possess these skills when they start out or have the time or resources to develop them.

"Capacity-building skills include how to raise funds, build coalitions, evaluate and redesign programs, conduct baseline research, build action plans, or publicize their successes."

For example, an assessment of fourteen Mexican environmental NGOs, conducted by the GreenCOM Project, identified some of the institution-building needs and deficiencies mentioned above. Although NGO leaders often look to institutional development as a "someday" activity, the assessment pointed out the fact that those interviewed

increasingly saw that an investment in these areas would enhance the group's overall program effectiveness and clout in shaping policy.

NGOs may find that they will have to team up with non-traditional partners, such as businesses or local governments. Adapting to such new relationships requires better understanding of the respective "cultures" and operational environments of the new partners. It calls for development of a language of consensus between previously disparate sectors of society. Similarly, corporations are progressively becoming more sensitive to environmental issues. Some are developing partnerships with environmental NGOs. Corporate culture is beginning to change.

Strategies to reposition a business to tap into the growing consumer demand for a cleaner and safer environment may involve seeking new markets or creating new management plans. Producers of lead-based gasoline, phosphates for

detergents, or chlorofluorocarbons, for example, may seek to develop substitute materials that meet consumer needs at reduced environmental cost. Some companies have found niches by developing new environmental services, an area expected to boom in the future. Berzelius Umwelt Service, for example, became Germany's first publicly quoted company devoted to environmental protection, aiming to benefit from stricter waste disposal regulations and a decline in landfill capacity. A number of companies are shifting their management culture to evolve within the context of environmentally sustainable development. Business decision making is changing as company leaders become more visibly committed to the environment, as corporate environmental policies are articulated and disseminated, and as firms establish management positions responsible for environmental oversight.

"In shifting institutional policy, businesses can look to EE&C to enhance their capacity to involve stakeholders....

Companies are increasingly seeing that open communication is both a responsibility and a bottom-line benefit."

In shifting corporate orientation, businesses can look to EE&C to enhance their capacity to involve environmental stakeholders. In several of its locations, Dow Chemical Company, for example, established advisory panels which consist of community representatives who meet regularly with Dow personnel to discuss issues such as environmental performance. This concept was expanded to include the formation of a Corporate Advisory Council, a

group of global policy and opinion leaders which meets three to four times a year to advise the company on environmental, health, and safety issues. Companies are increasingly seeing that open communication with stakeholders is both a responsibility and a bottom-line benefit.

Strengthening capacity to address policy change not only requires learning new skills, but also learning new ways to think and act. Decision makers need to learn to listen to the people. The people need to ensure that their voice is effectively heard. NGOs have to hone their skills to become effective advocates, educators, and managers of environmental change. Businesses need to formulate new approaches that are in tune with the increasingly environmentally oriented marketplace.

Linking Behavior Change to Policy Development

Environmental awareness at a global level is high, yet people continue to deplete natural resources at an unprecedented rate. Similarly, advocates champion issues that they want to see turned into policies and laws. But will such policies and laws truly make a difference? Will biodiversity levels be increased or maintained? Will forest, water, and soil resources be further degraded or improved? Will urban air quality remain a health hazard to children and the elderly? These policies' chances are enhanced if they take into account the variable of *behavior*. Indeed, there has always been a broad gap between making national policy and understanding what actually causes people to engage in environmentally disruptive behavior. Policies need to be built around pragmatic and tested knowledge about how to foster constructive environmental behavior.

While environmental policies set overall frameworks and guidelines, ultimately it is not policy, but behavior, that drives environmental action. Human behavior is generated by perceived self-interest. As an example, if people log forests in an unsustainable manner for their livelihood, they will not change unless they can substitute another equal or better technology, economic alternative, or practice.

"While environmental policies set overall frameworks and guidelines, ultimately it is not policy, but behavior, that drives environmental action."

"Linking behavioral research to environmental policy formulation and implementation is a new and potentially pivotal contribution of EE&C to environmentally sustainable development."

Linking behavioral research to environmental policy formulation and implementation is a new and potentially pivotal contribution of EE&C to environmentally sustainable development. Knowing why people act the way they do, what factors cause them to do so, and what changes can be made to enable people to adopt more environmentally sound behaviors can spell the difference between

developing policies that work and those that don't.

Integrating sound research-driven knowledge of human behavior into environmental program design is still in its initial phases, but holds great promise. Applied research provides insights into the benefits and barriers that people perceive in relation to a proposed new initiative. Research techniques help hone appropriate messages and identify the most effective vehicles by which these messages can be delivered. The integration of such behavioral data into the policy process can make policies more effective, enforceable, and beneficial.

Sound EE&C programs that integrate behavioral data into environmentally sustainable development can assist in many ways (Booth, 1996):

- ▶ **Empower people to take action:** Many countries have implemented successful education and communication activities that have increased awareness of the need to protect and conserve natural resources. People are now ready for action, but they need and want to know what they can do that will make a difference. For example, during recent focus groups conducted through the GreenCOM Project in El Salvador, participants said

that they were already aware of the degradation of their environment, but they didn't know what they could do to solve these problems. In response, communicators designing a national-level environmental campaign changed their strategy from an awareness campaign to a campaign promoting specific behaviors that urban and rural people could adopt to protect and conserve natural resources.

- ▶ **Build upon what people are already doing correctly:** The social science processes used in EE&C identify what people are already doing that is similar to the target behaviors. Successful education and communication activities can build on what people are already doing correctly, rewarding and shaping their behavior toward the next step. This also makes it more likely that environmental policies take the behavioral dimension into account and become more compatible with local culture and social norms.
- ▶ **Develop practical methods to measure behavior change:** Measuring behavior change can strengthen and evaluate the impact of particular policies and programs. Such methods provide cost-effective, practical ways of monitoring progress and fine-tuning as necessary.
- ▶ **Develop more effective education, communication, and promotional strategies:** Audience research assists in developing more effective strategies that address and build on specific factors that influence target behavior adoption.

In Egypt, EE&C helped mend a system of human relationships that improved people's access to clean water and shifted institutional policy within the Ministry of Public Works and Water Resources (MPWWR). Farmers throughout the country

rely on a network of irrigation canals, called mesqas, to water their crops. The mesqas, however, are often used as garbage dumps; weeds also encroach on them, preventing efficient water flow. The problem that the Ministry has faced is how to get farmers to maintain and improve their mesqas.

"Knowing what people think and why they act the way they do can pinpoint a problem and identify the right way to solve it."

The MPWWR, with GreenCOM assistance, focused on one mesqua in middle Egypt as a test site. It had been assumed that farmers did not know the importance of mesqa maintenance, which an awareness campaign could address. However, focus groups, in-depth interviews and direct observation turned up a very different problem. The farmers already recognized the importance of clean mesqas. However, they viewed mesqa maintenance as the government's responsibility. Furthermore, interviews with women pointed out that some people threw garbage in the canals because no adequate garbage disposal sites existed.

A bargain was struck. Government and farmers would work together. The farmers established a committee to organize a mesqa clean-up. The government trucked the garbage away, and the community contributed their labor and paid for the cleaning equipment. More importantly, the community got together to articulate their concerns, and Ministry staff listened and responded. Without this process, a more general awareness campaign might have taken place, and both farmers and Ministry staff would have been frustrated at the fact that nothing seemed to change. Instead, both farmers and officials looked at their usual assumptions and ways of doing business in a new light.

Knowing what people think and why they act the way they do

can pinpoint a problem and identify the right way to solve it. Environmentally sustainable development calls for immense global economic, technological, social, political, and cultural transformation. It calls for new vision, new thinking, and new patterns of behavior by people, institutions, communities, and nations. As policies are shaped through open dialogue, EE&C research techniques can help test policy alternatives and options among stakeholders, deliver appropriate messages, and measure behavior change.

Measures of Success

As described throughout this paper, EE&C helps integrate people's knowledge, attitudes, and behaviors in the policy development process. Ideally, policy makers and implementers should measure the impact of their efforts and extract lessons from successes and failures.

Criteria related to **policy formulation** can include answering such questions as C

- ▶ how many stakeholders and stakeholder groups are represented in the formulation process, and what is the extent of their involvement?
- ▶ how are suggestions and opinions expressed by different stakeholders reflected in the policy?

Criteria addressing **policy articulation** can include C

- ▶ what aspects of the policy are disseminated, who is targeted, and how?
- ▶ to what extent do people understand about the policy and its implications in the context of other policies, regulations, and practices?

And, criteria addressing **policy implementation** may lead to asking C

- ▶ how has the policy been translated into programs ?
- ▶ to what degree does the policy and its programs have public acceptance?
- ▶ to what extent are people, institutions, businesses, and others complying with the policy?

Monitoring the effect of EE&C on policy development allows for instituting mid-course corrections, as well as for finding the optimum means to integrate people into the policy process.

While the criteria listed above may not determine the complete answer, they can provide some guidance and a starting point to those viewing the policy process.

At the Core of the Policy Process

EE&C plays a pivotal role in the process of developing policies and ensuring that they are effectively carried out. EE&C fosters the environmental literacy of key players in the policy process: decision makers and constituents. Both are informed and educated about viable and equitable solutions to pressing problems. With growing environmental awareness, constituents see their stake in the policy process. They become empowered and serve as advocates for their reform agenda. EE&C facilitates dialogue between the grassroots and policy makers that can lead to dispute resolution and to the forging of equitable and effective policies.

"EE&C facilitates dialogue between the grassroots and policy makers that can lead to dispute resolution and to the forging of equitable and effective policies."

EE&C, by working across sectors and institutions, can bring a broad base of expertise and support to the policy process. By tapping local knowledge about what can and does work, EE&C is able to bring the human dimension to the national policy making forum.

EE&C also provides invaluable feedback to show how well a given policy is or could be implemented by gauging public perception, by adjusting policies and perceptions, and by increasing public understanding.

As we build toward an environmentally sustainable future, many of the decisions that we face now, and will face in the years ahead, demand new ways to listen to opposing points of view, and new ways to accommodate deeply held and differing values. Conventional decision-making mechanisms have

tended to be centralized to exclude rather than include diverse interests and points of view. They have, as a result, not been able to cope well with the complexity that issues of sustainability present.

Sustainable development requires integrated decision making. That means learning to rethink the ways that people deal with problems. The environment, the economy, and social structures and institutions are interdependent in ways we have only begun to understand. This has broad implications for policy making. Policy making increasingly will need to integrate popular views and knowledge. It will also hinge on a keen understanding of what motivates people and what triggers them to act in ways that can safeguard the planet's environment. Decision making in the future will be more consensual and will be combined with a multi-stakeholder approach to problem solving. EE&C approaches will be pivotal in ensuring that all voices are heard in the policy arena.

The effectiveness of the policy process will depend to a significant degree on its ability to accommodate complexity by gaining access to people with first-hand experience of its variability. Such approaches often extend far beyond what current bureaucratic structures can achieve. EE&C approaches can infuse the process with invaluable information and can greatly improve the chances of reconciling competing interests.

A multi-stakeholder consensus approach to policy formulation is vital to environmentally sustainable development as it includes, from the outset, all those who have a stake in the outcome of a given decision. Opportunities for using consensus processes exist at all stages of decision making involving issues of sustainability from establishment of broad policies and regulations to long-range planning, allocating land and resources, resolving specific disputes, and monitoring and enforcement.

EE&C will play an increasingly visible role in policy making as the process itself becomes more democratic and works toward environmentally sustainable development. Involving people in working with their governments will shape a better future to come.

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